ECR Bus Speed & Reliability Study

DRAFT IMPROVEMENTS

The El Camino Real Bus Speed and Reliability Study provides a corridor-wide vision to reduce travel times by 15 percent and achieve a more dependable service. As the backbone of the SamTrans network, Route ECR serves 13 cities across 25 miles. Route ECR accounts for one quarter of average weekday bus ridership on SamTrans – with the majority of riders being lower income people of color. This study envisions faster and more reliable Route ECR service primarily through bus stop balancing, bus bulbs, and queue jumps, while also investigating the suitability of bus-only lanes on congested roadway segments.

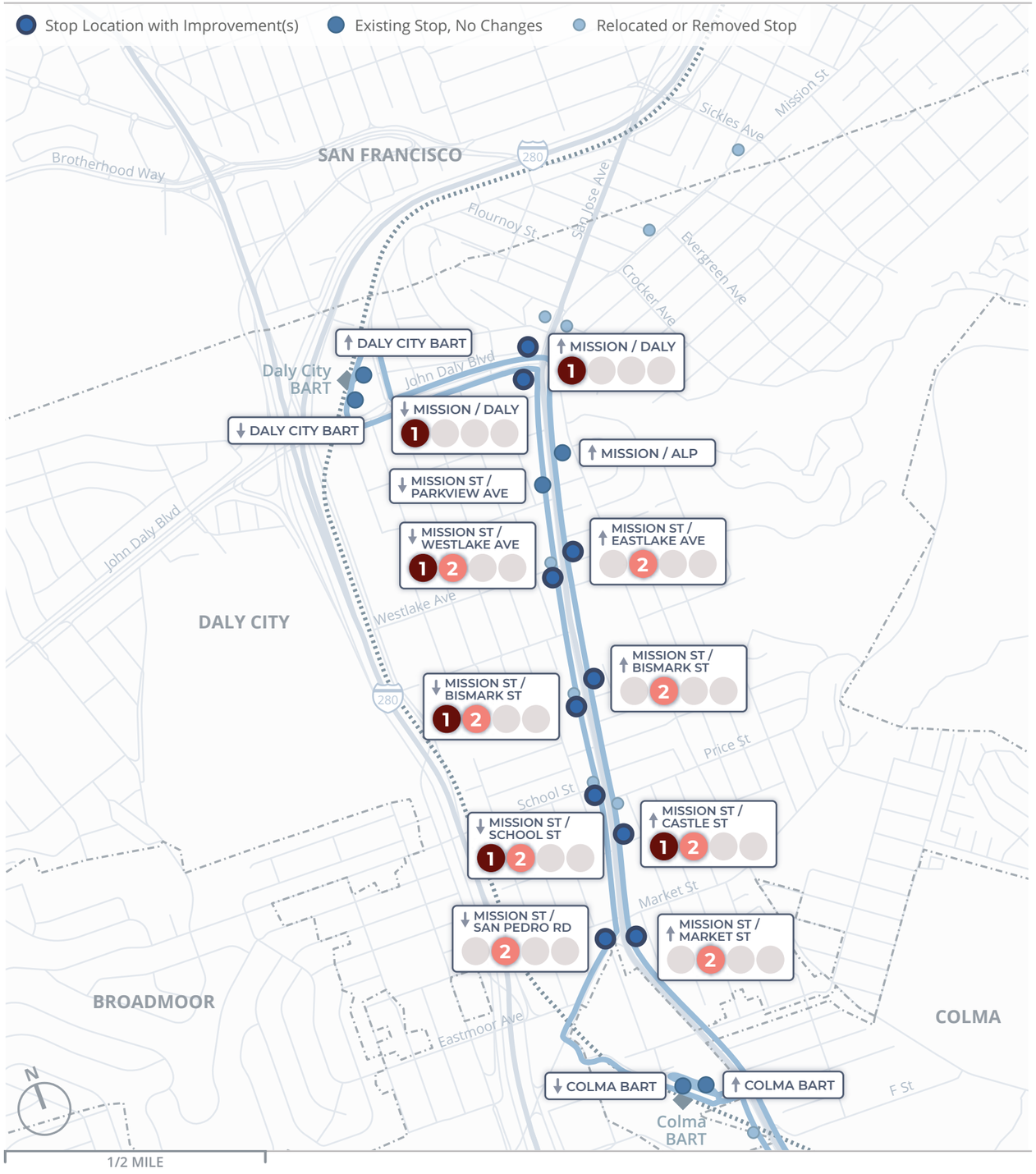
SamTrans encourages cities to consult this vision and the specific bus priority treatments when conducting capital improvement and development review processes to achieve more equitable and sustainable mobility outcomes on El Camino Real.

APRIL 2022

samTrans

Daly City

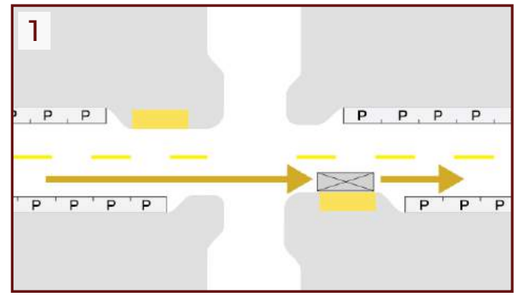
PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS



The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in Daly City.

1 Bus Stop Balancing & Placement

Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every ¼ to ½ mile, with shorter spacing occurring in areas with high ridership and/or serving transit connections, public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness of the corridor's transit signal priority system and avoid delays and conflicts associated with near-side and pullout stops.



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Bus bulbs are curb extensions that allow buses to stop in the lane of traffic. Bus bulbs improve speed and reliability by reducing the amount of time lost when merging in and out of traffic, while also reducing pedestrian crossing distances. Where space permits, near-level boarding and separated bikeway bypasses are suggested features for bus bulbs.

3 Queue Jumps

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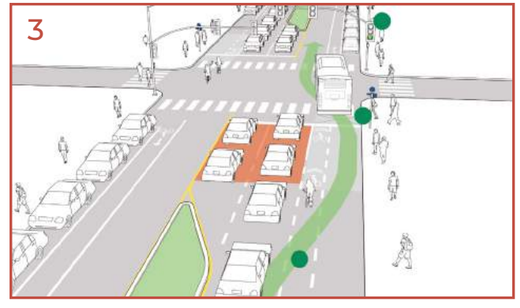

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Colma

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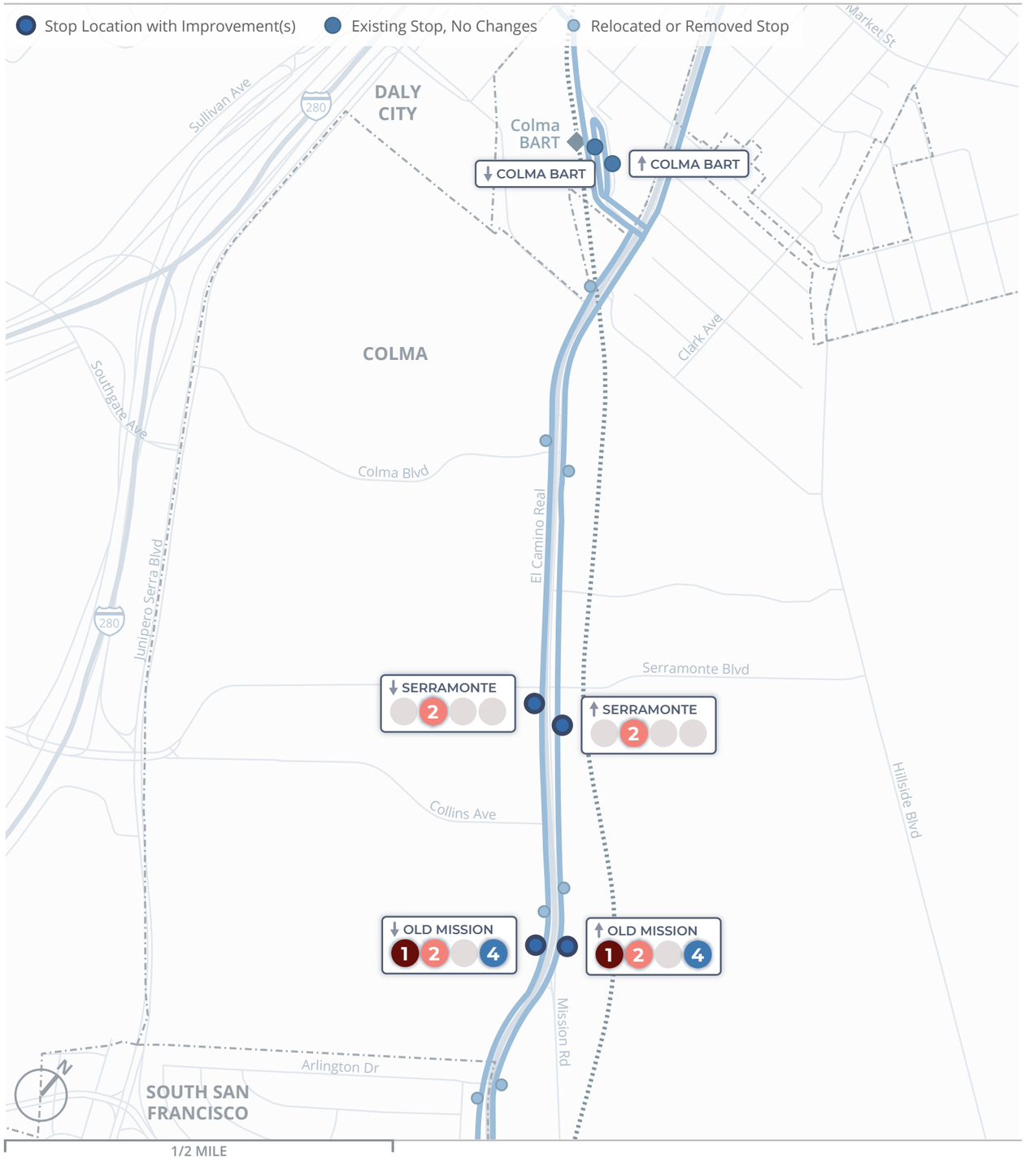

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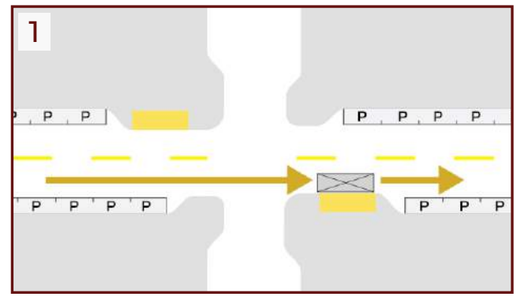

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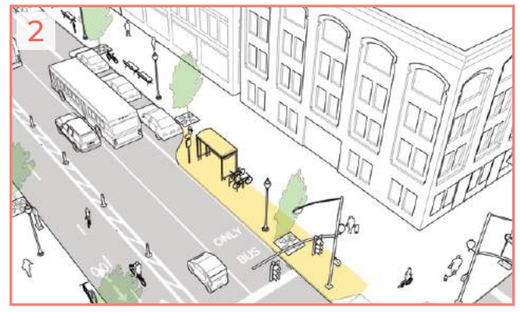

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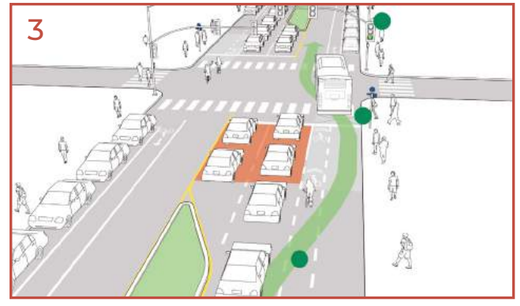

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South San Francisco

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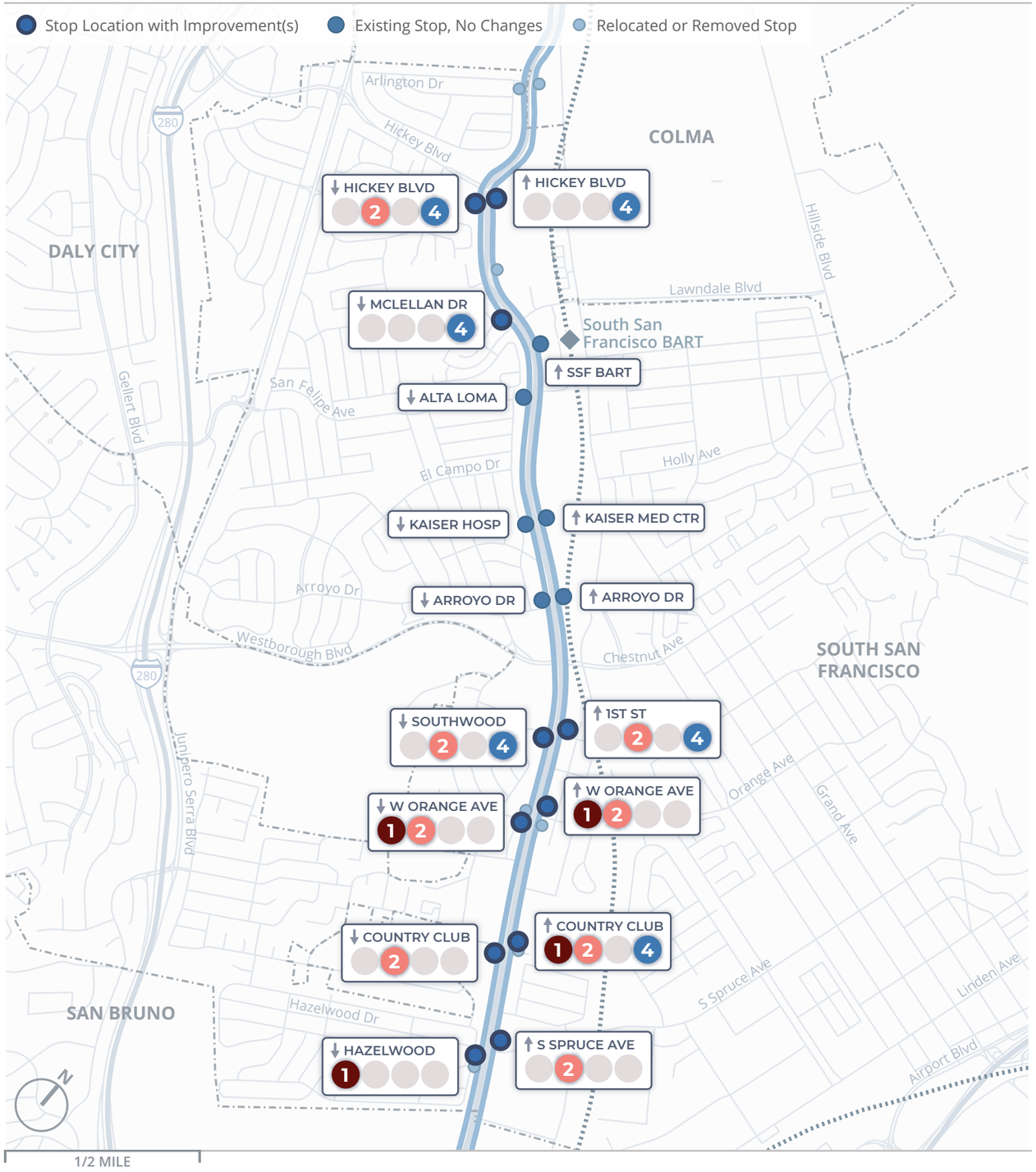

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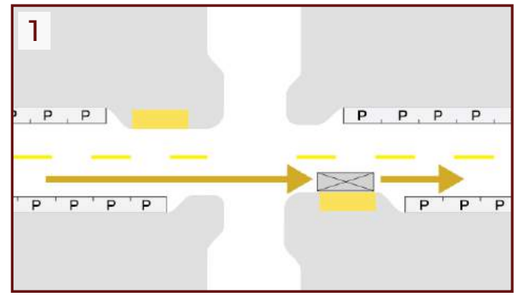

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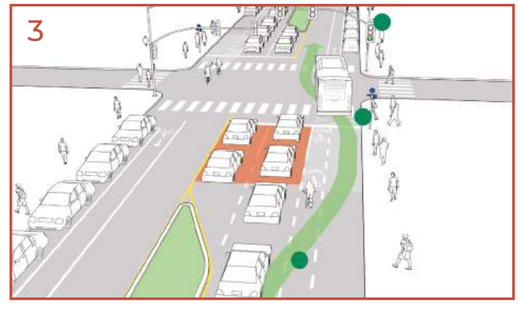

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San Bruno

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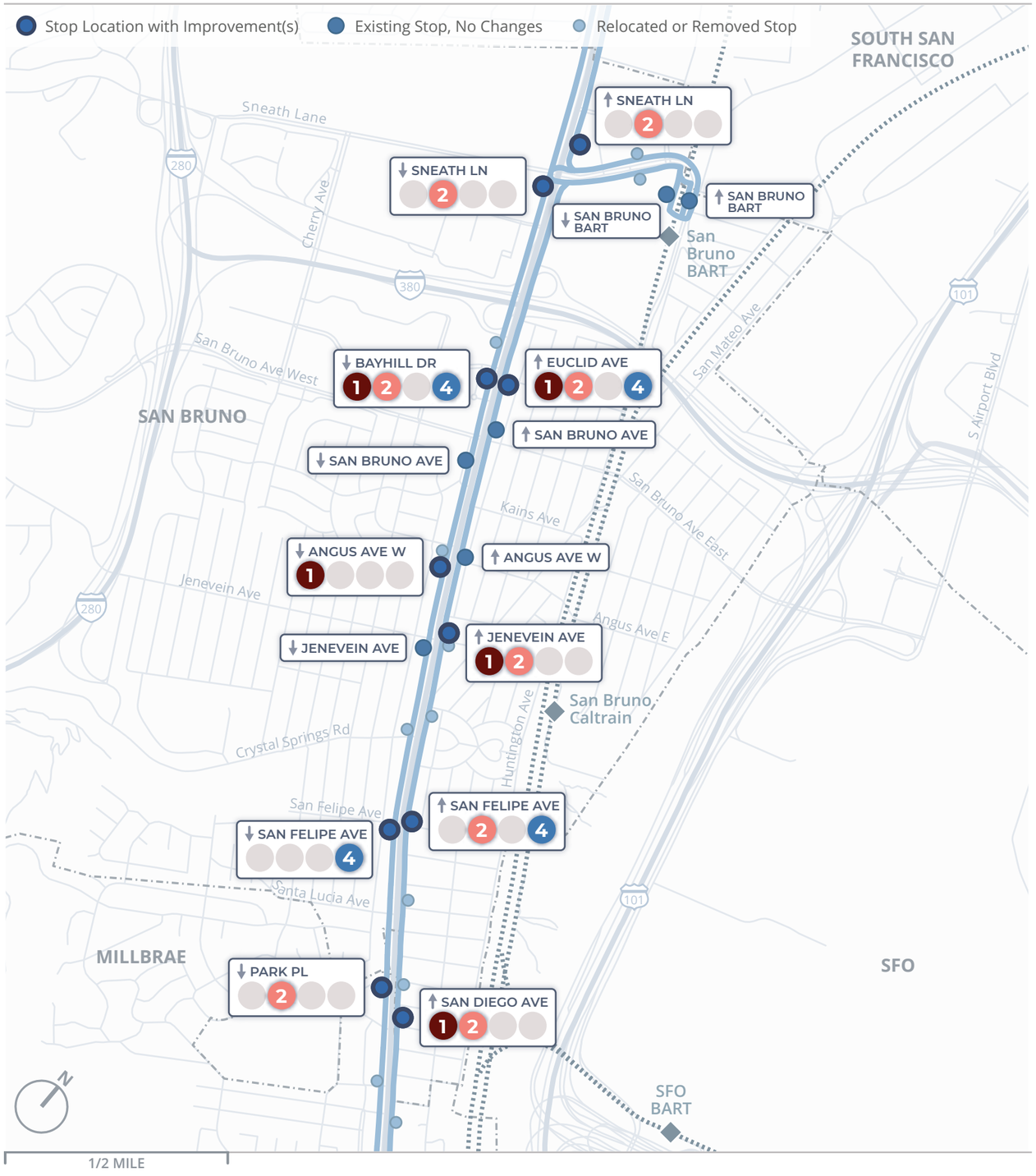

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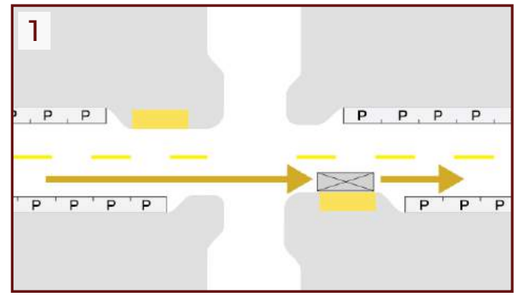

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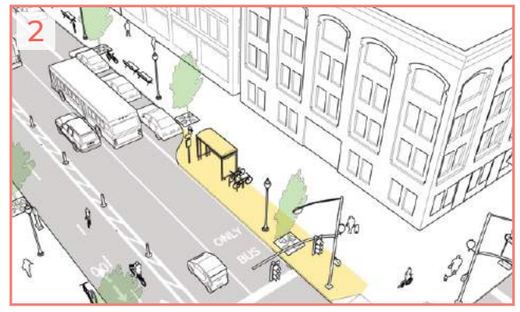

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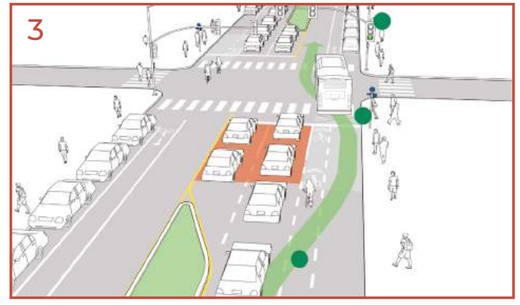

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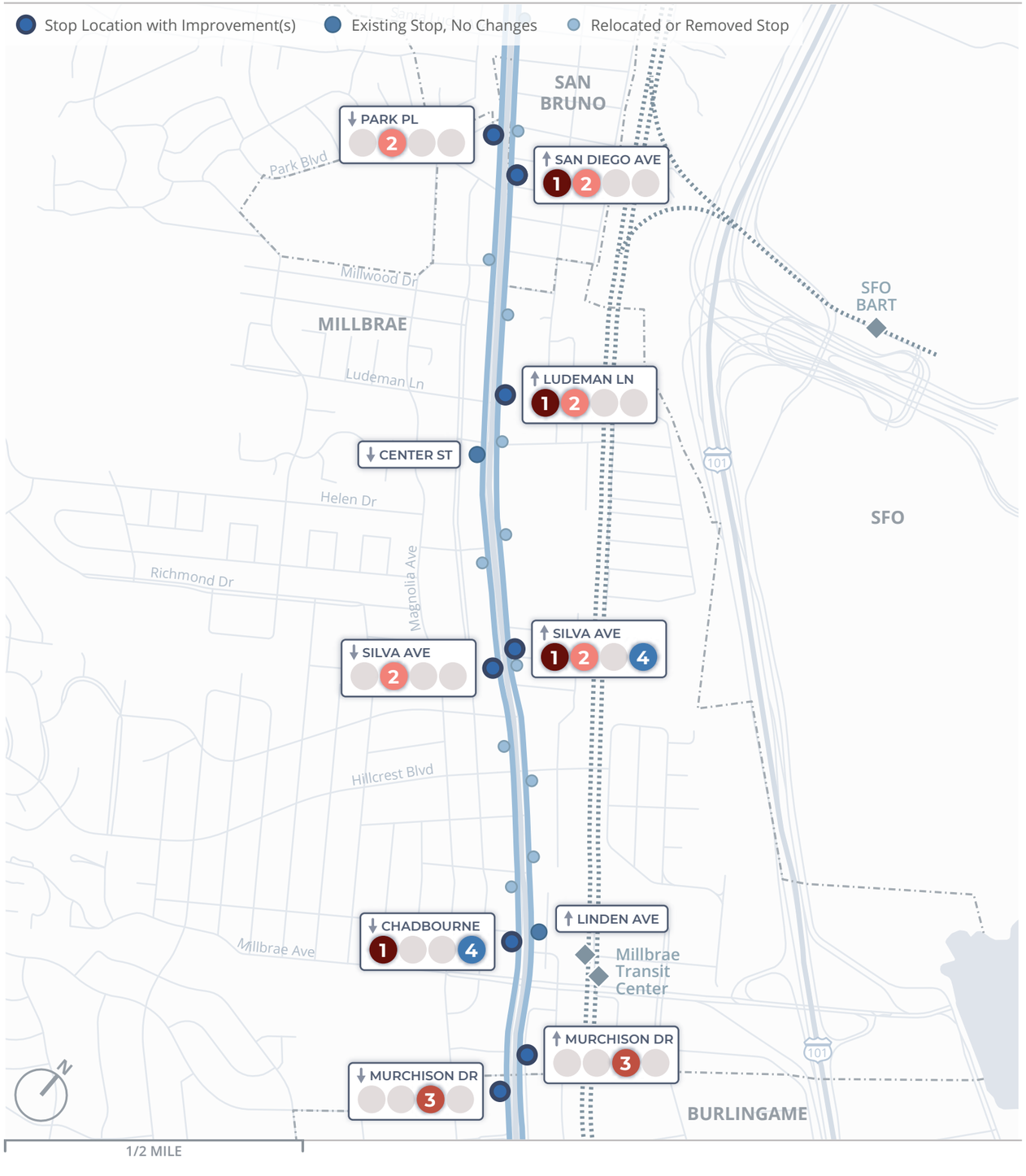

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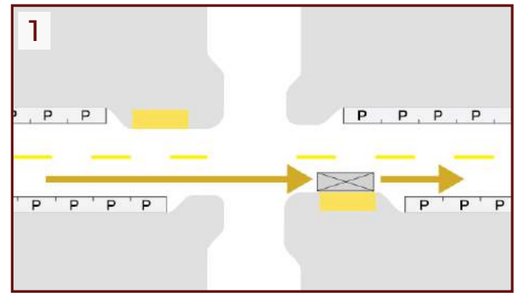

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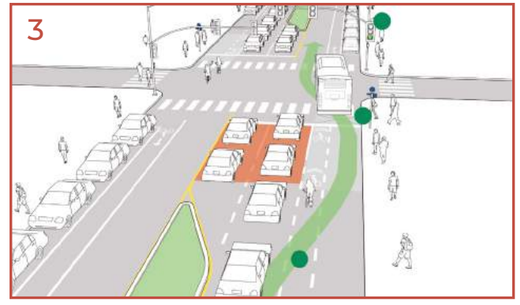

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Burlingame

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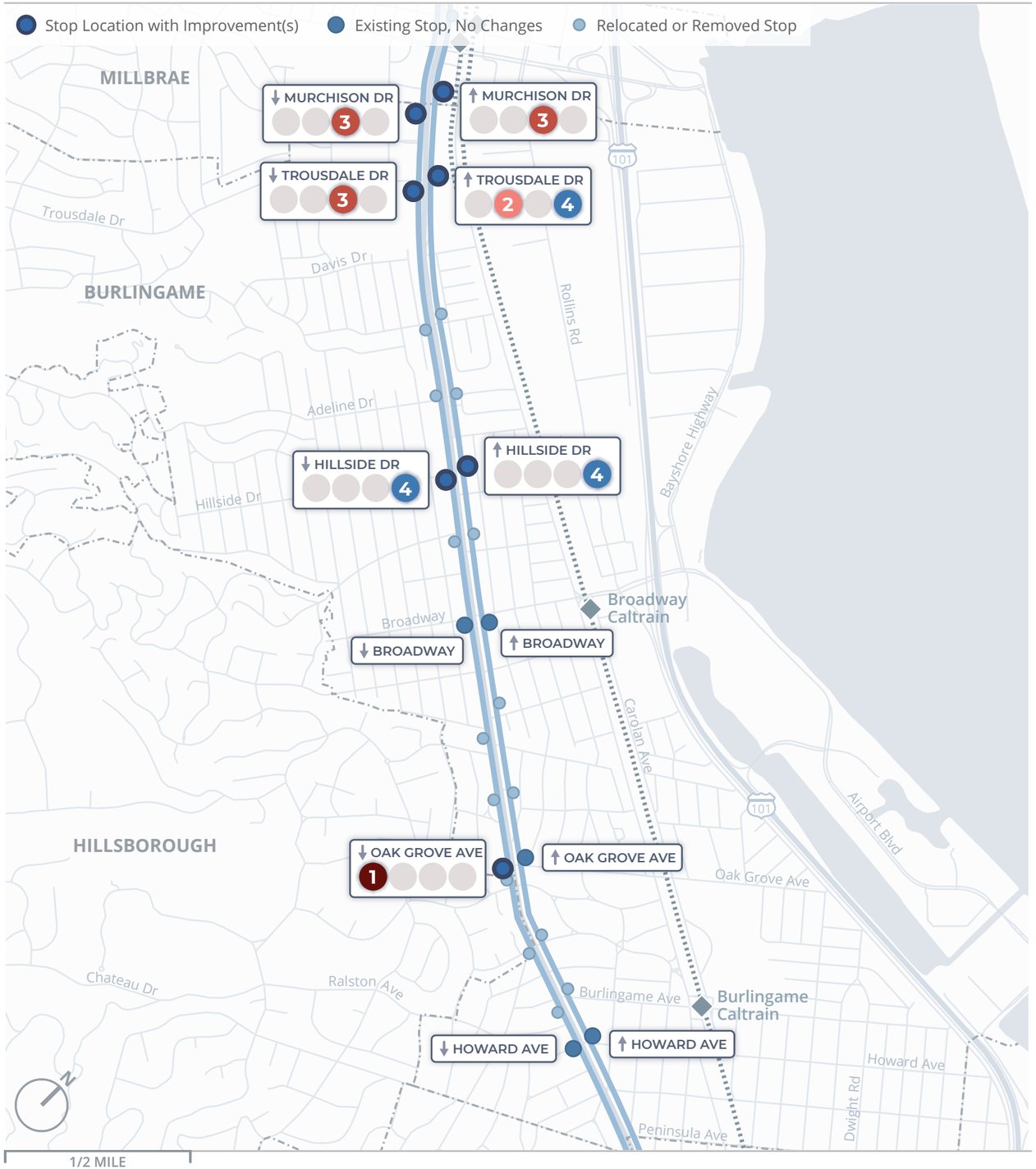

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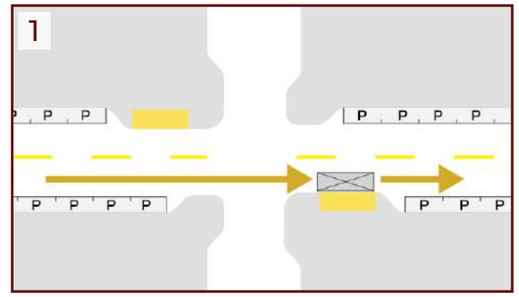

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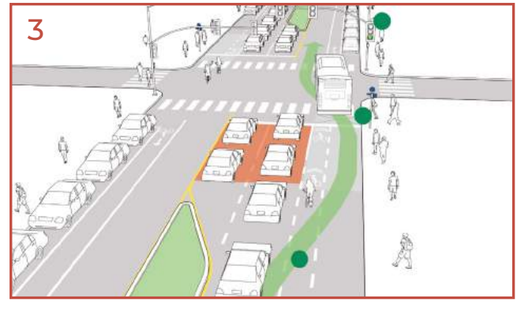

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San Mateo - Northern Segment

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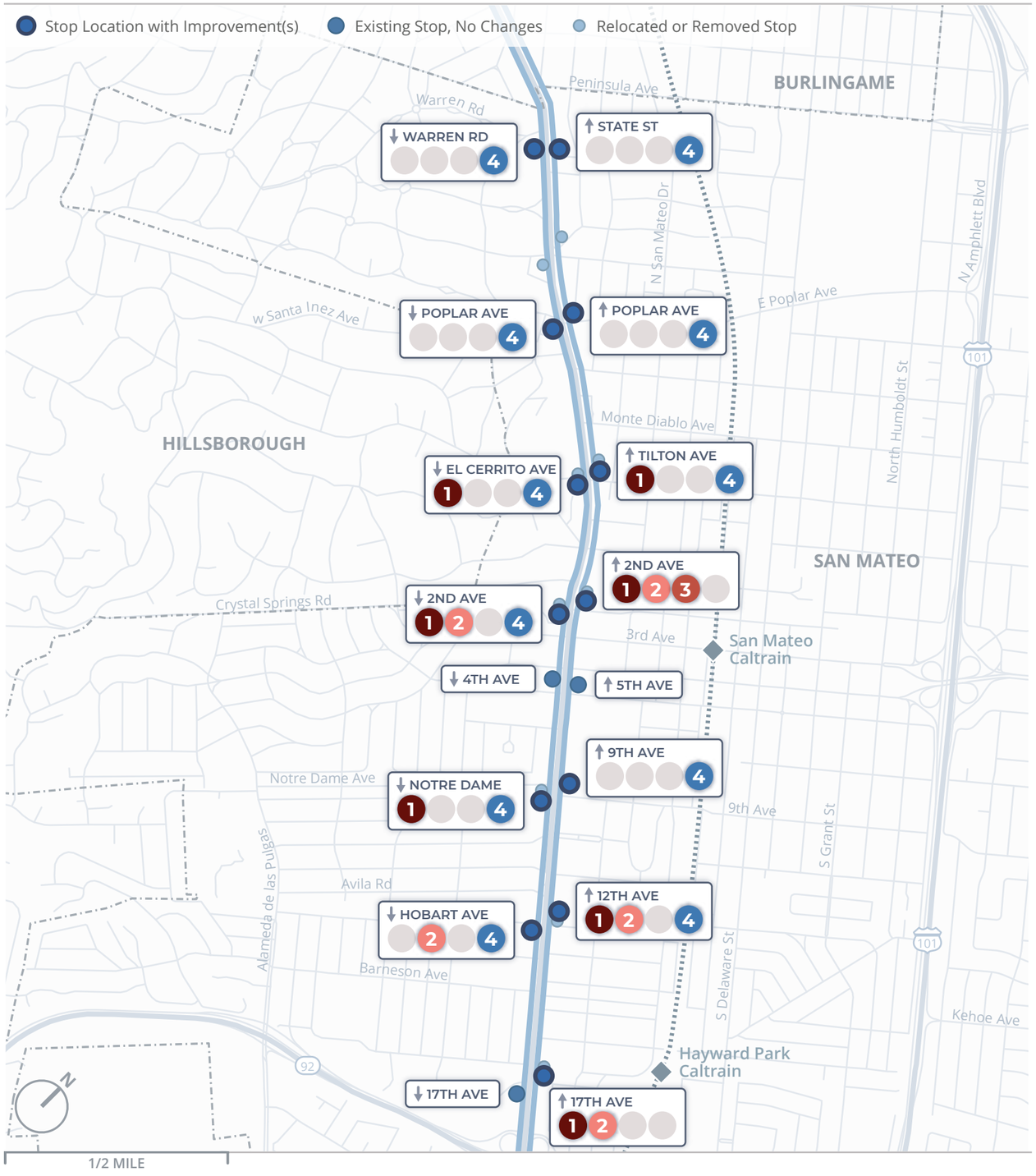

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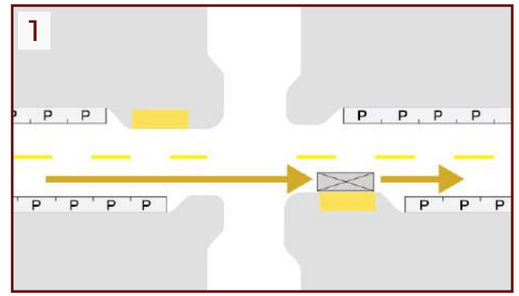

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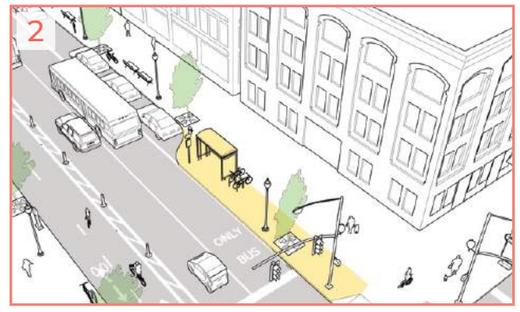

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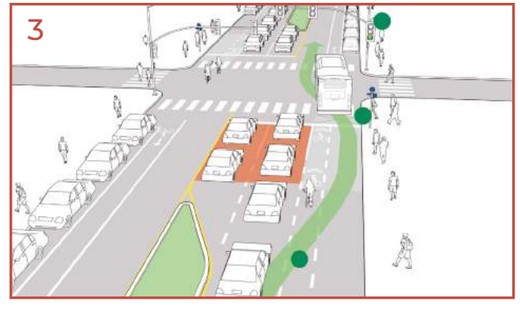

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San Mateo - Southern Segment

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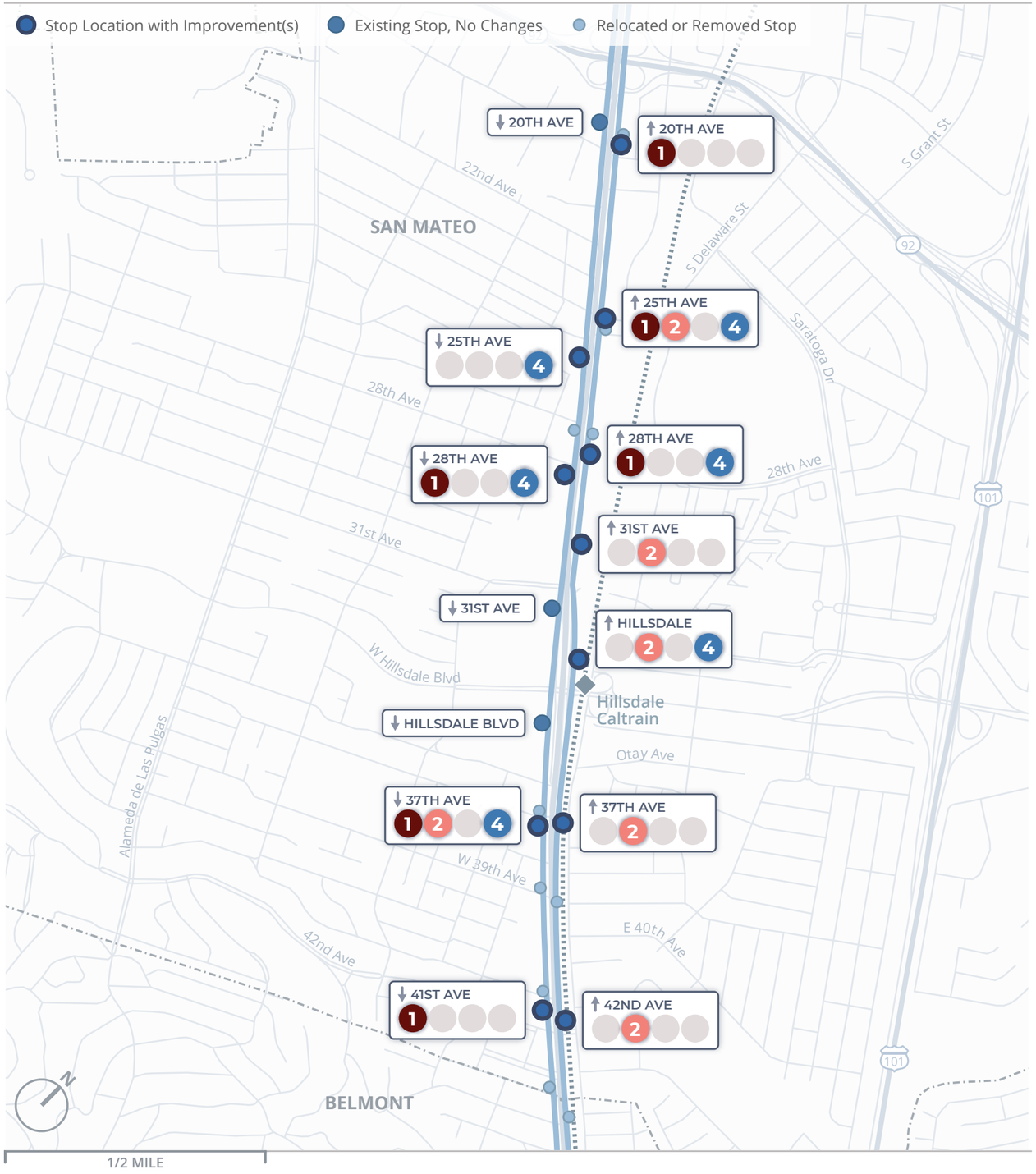

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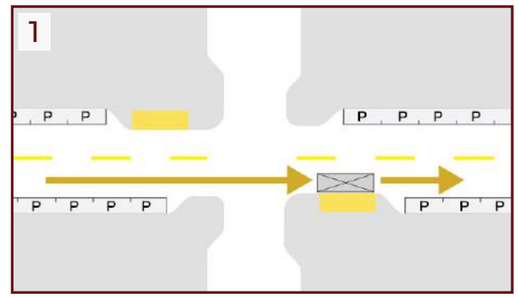

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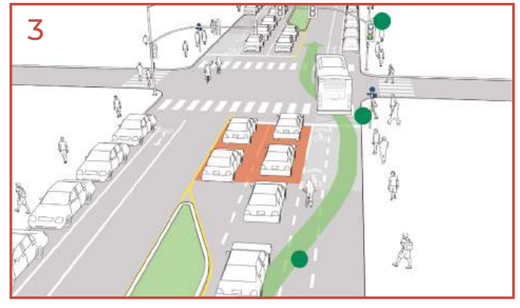

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Belmont

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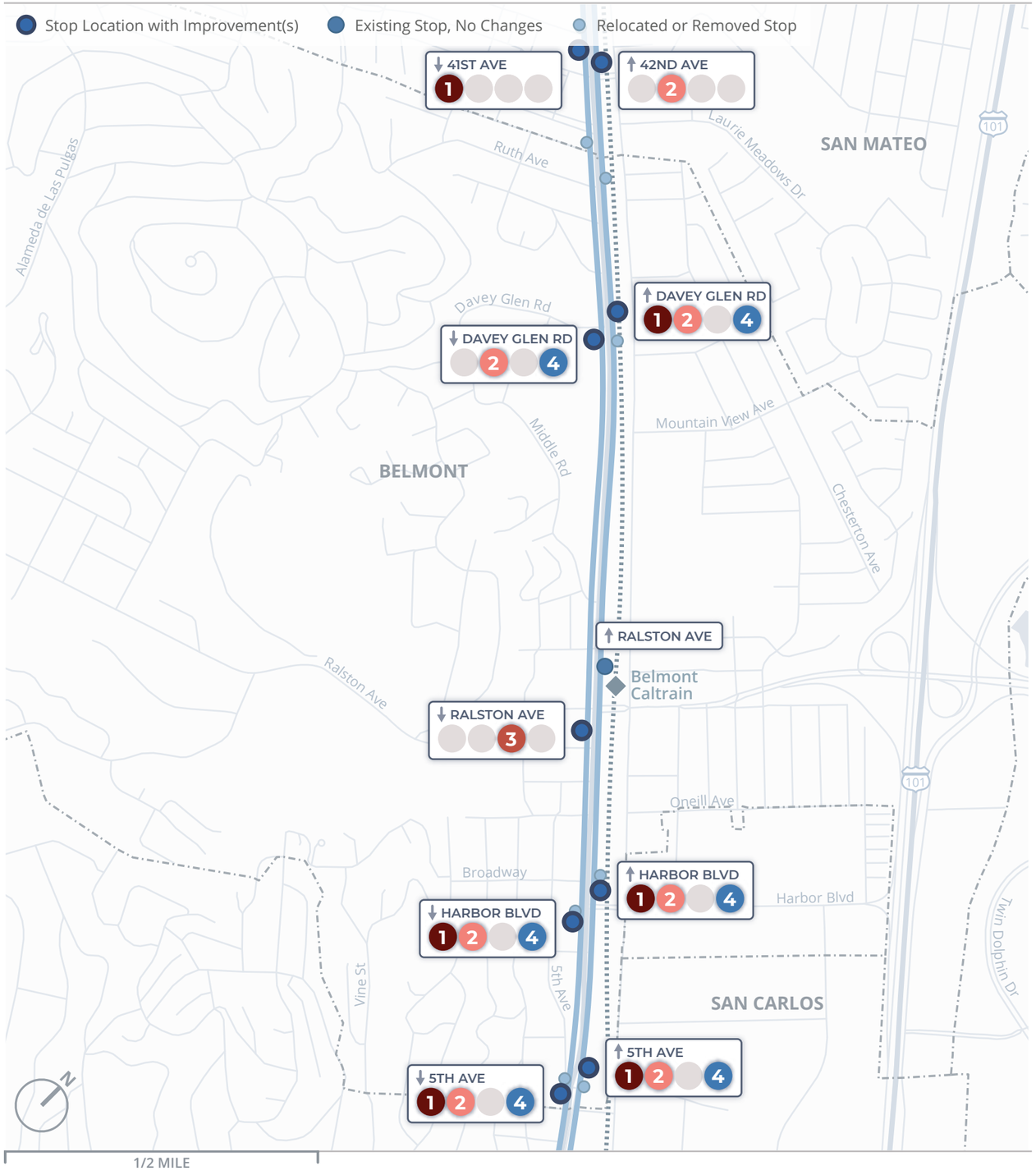

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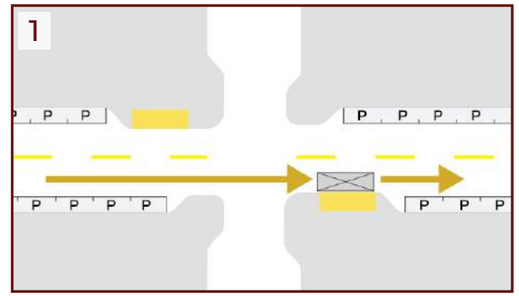

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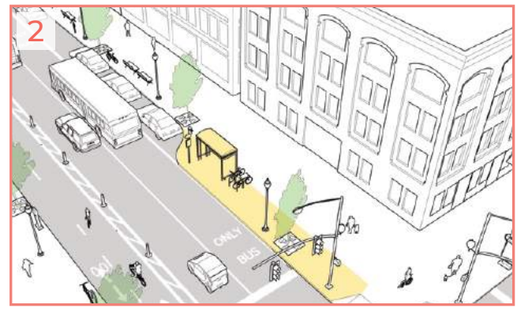

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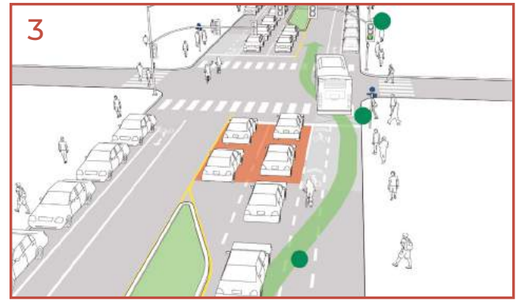

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San Carlos

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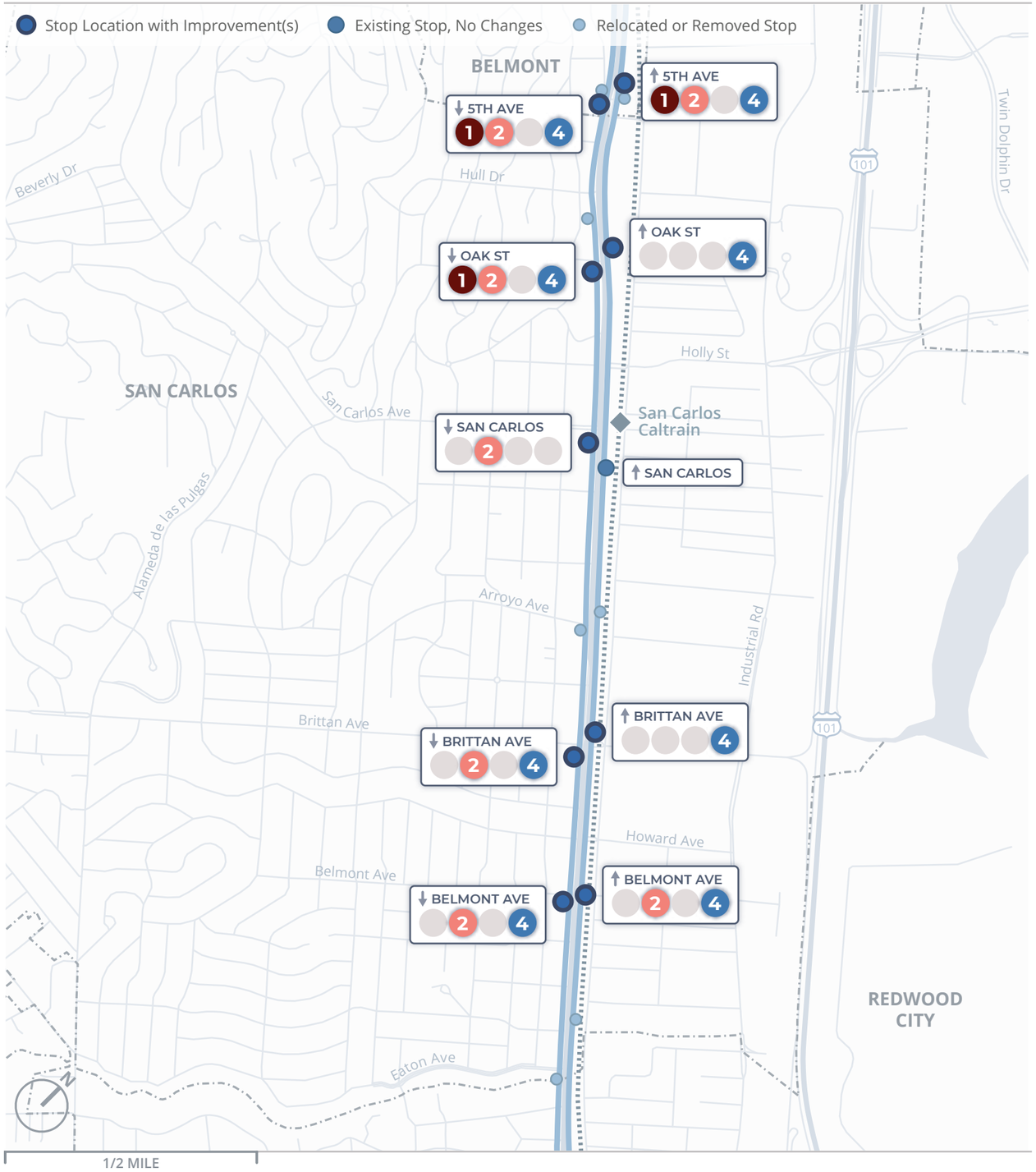

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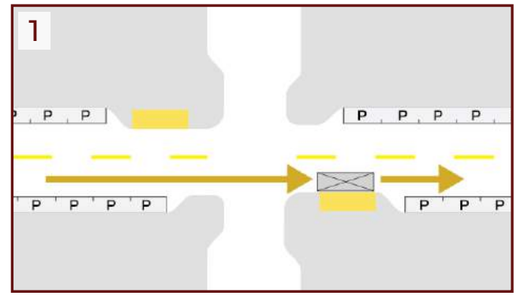

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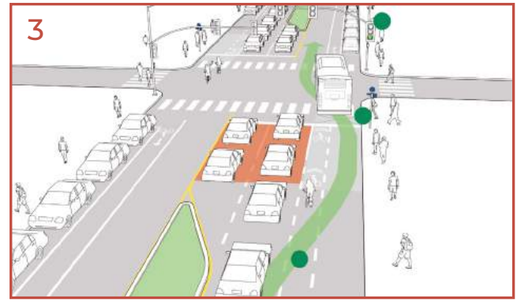


4 Pedestrian Improvements

Improving pedestrian connections to bus stops helps reduce overall passenger travel times and access barriers. Pedestrian access improvements may include striping unmarked crosswalks, adding traffic signals or pedestrian hybrid beacons at unsignalized crossings, adding or widening sidewalks, and adding or modernizing curb ramps.

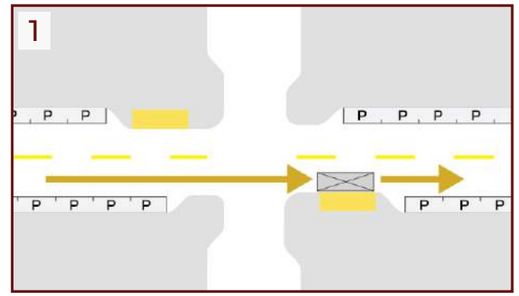
Redwood City

PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS

The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in Redwood City.

1 Bus Stop Balancing & Placement

Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every ¼ to ½ mile, with shorter spacing occurring in areas with high ridership and/or serving transit connections, public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness of the corridor's transit signal priority system and avoid delays and conflicts associated with near-side and pullout stops.



2 Bus Bulbs

Bus bulbs are curb extensions that allow buses to stop in the lane of traffic. Bus bulbs improve speed and reliability by reducing the amount of time lost when merging in and out of traffic, while also reducing pedestrian crossing distances. Where space permits, near-level boarding and separated bikeway bypasses are suggested features for bus bulbs.

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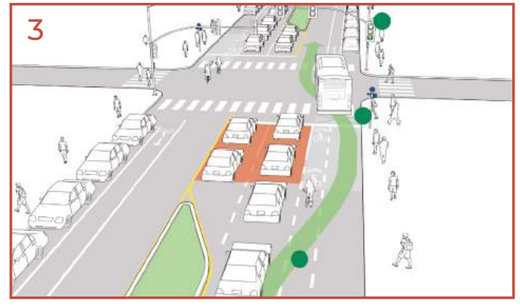

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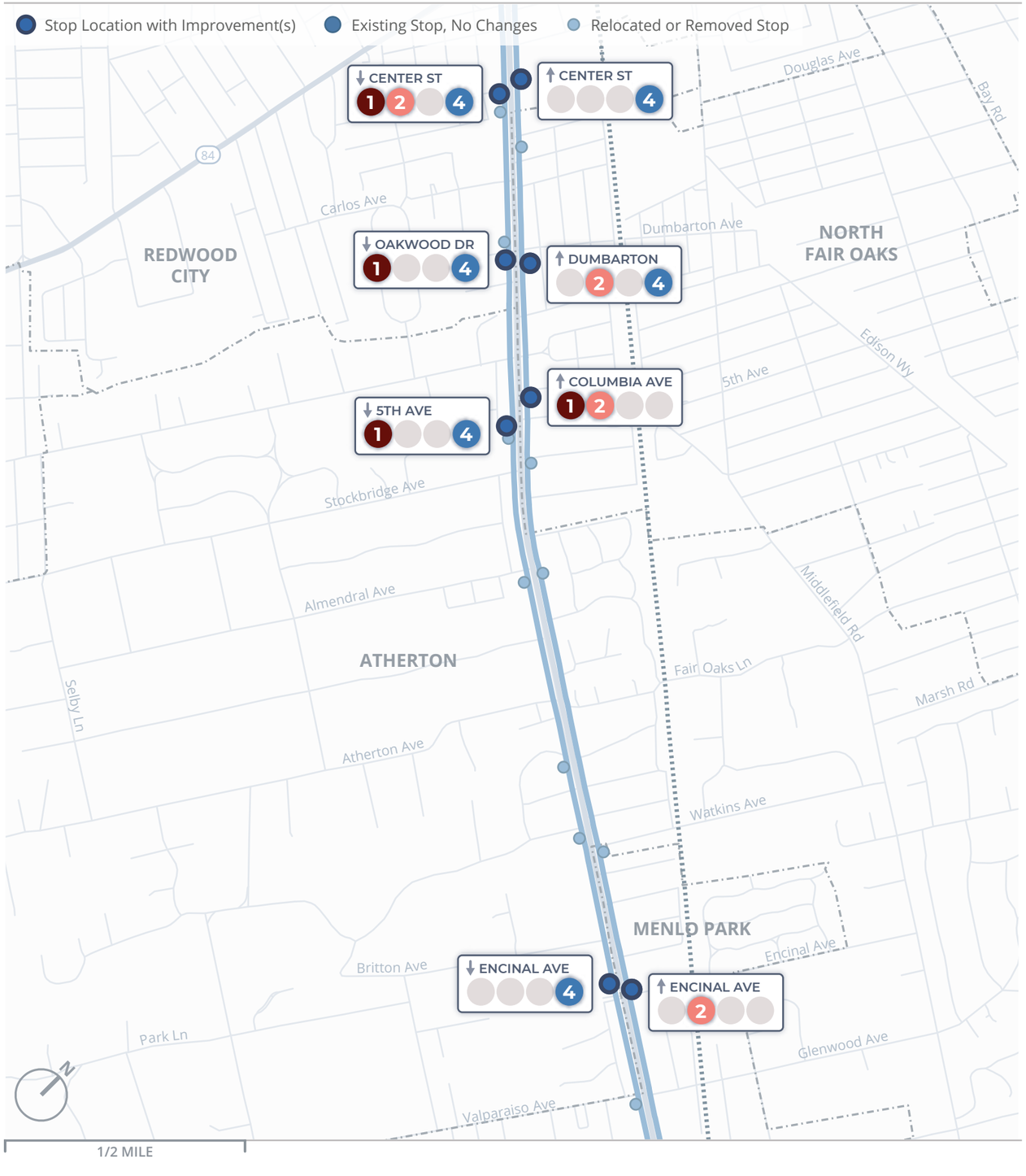
North Fair Oaks and Atherton

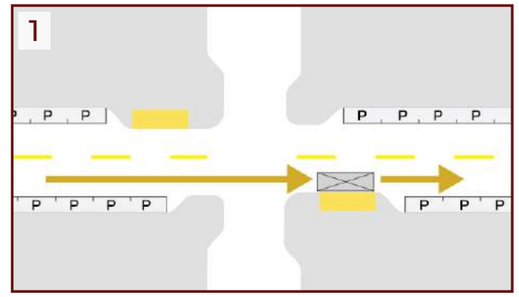
PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS



The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in North Fair Oaks and Atherton.

1 Bus Stop Balancing & Placement

Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every ¼ to ½ mile, with shorter spacing occurring in areas with high ridership and/or serving transit connections, public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness of the corridor's transit signal priority system and avoid delays and conflicts associated with near-side and pullout stops.



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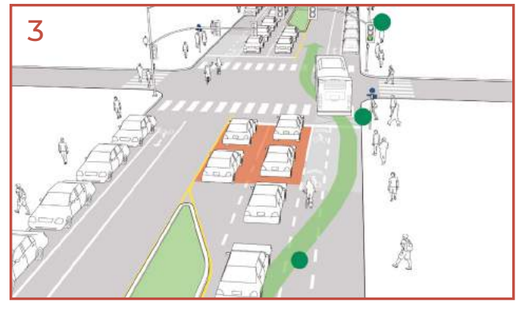

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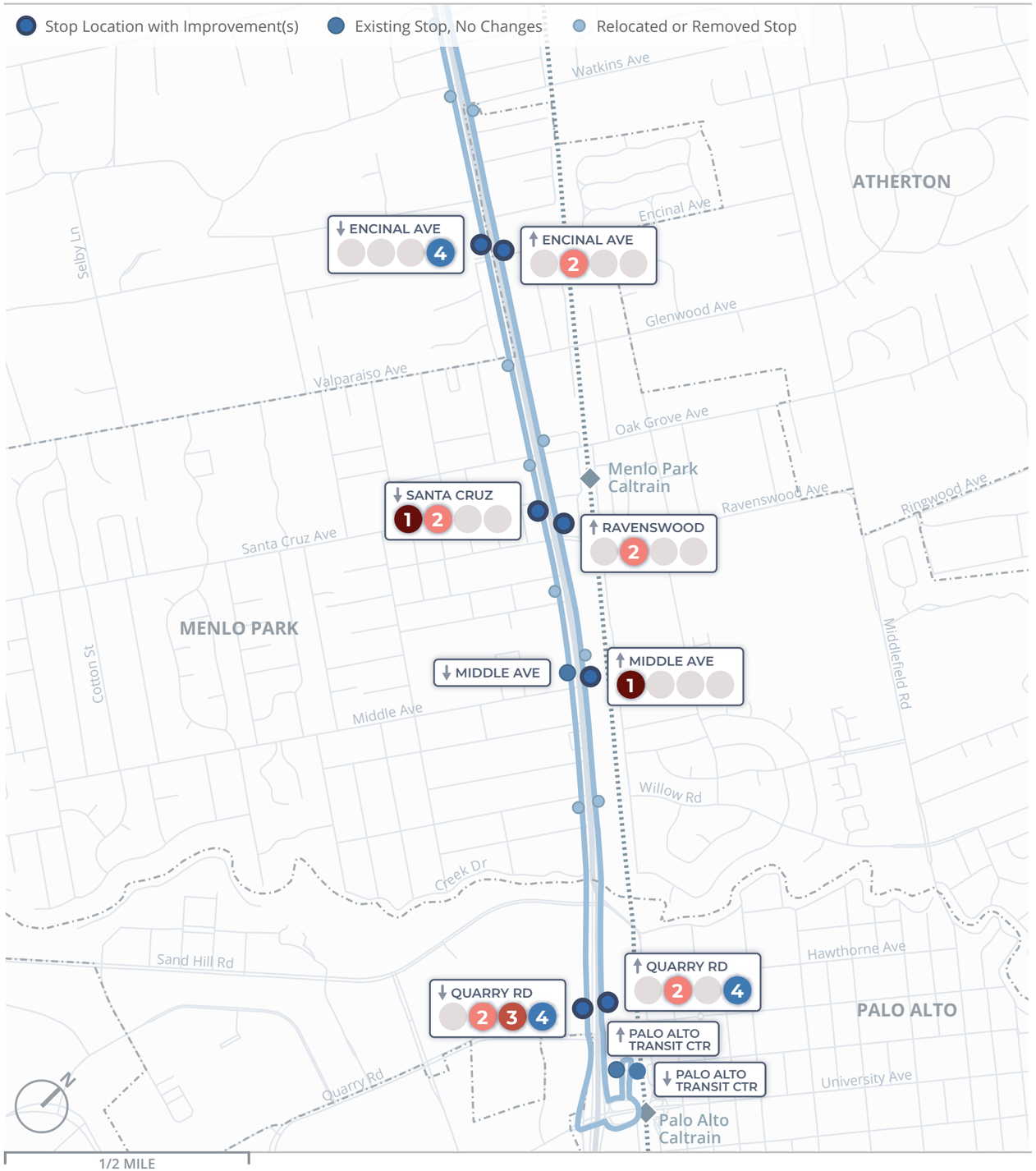
Menlo Park and Palo Alto

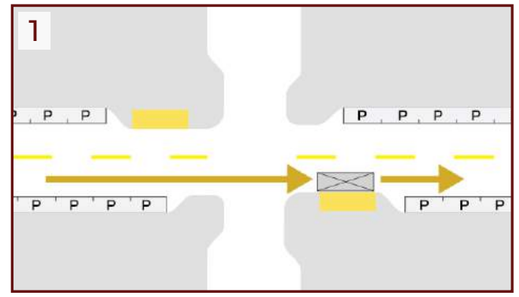
PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS



The following infrastructure improvements are recommended to support faster and more reliable bus operations on El Camino Real in Menlo Park and Palo Alto.

1 Bus Stop Balancing & Placement

Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every ¼ to ½ mile, with shorter spacing occurring in areas with high ridership and/or serving transit connections, public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness of the corridor's transit signal priority system and avoid delays and conflicts associated with near-side and pullout stops.



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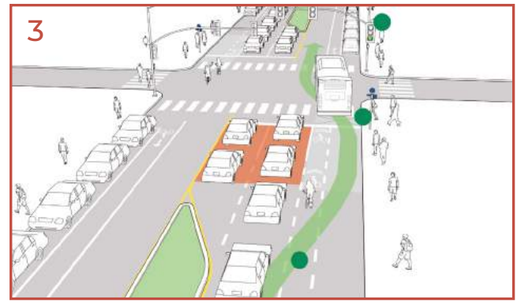

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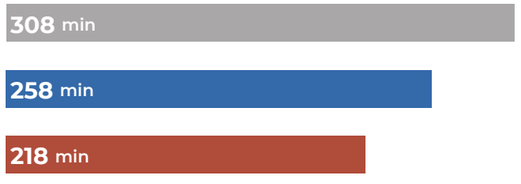
What About Bus Lanes?

Bus-only lanes help buses bypass traffic congestion to achieve faster and more reliable service. On average, curbside bus-only lanes could help reduce travel times by an additional 15 percent, providing complementary benefits to the corridor's existing transit signal priority system and proposed bus stop balancing, bulbs, and pedestrian access improvements. Bus-only lanes can be implemented with signage and striping changes at a relatively low cost.

Bus-only lanes would be most useful along congested segments of El Camino Real where buses could bypass traffic congestion. Providing bus-only lanes along such segments requires tradeoffs; usually, a general purpose lane would need to be converted to accommodate a bus lane.

This study identifies Millbrae, San Mateo, San Bruno and Menlo Park as the top candidates for bus-only lanes. Bus speeds, passenger loads, and observed travel time savings during COVID indicate that bus-only lanes could provide significant travel time savings to riders. SamTrans would like to work in partnership with these cities to explore the feasibility of a bus-only lane in the future.

CHANGE IN ECR TRAVEL TIME (ROUND TRIP)



Implementing the Vision

Implementing this transit vision for El Camino Real will require coordination between SamTrans, Caltrans, and the cities along the corridor. SamTrans looks forward to working in partnership with cities and other stakeholders to weave the improvements identified in this vision into future local and regional planning efforts. For questions, please email ecrstudy@samtrans.com

Bus-only lanes could increase speeds by an additional 15 percent on El Camino Real.